

Remarks/Arguments

The foregoing amendments and these remarks are in response to the Final Office Action dated April 7, 2004. This amendment is accompanied by a Request for a Three-Month Extension of Time and the appropriate fee for the Extension of Time.

Claims 1,2, 4 - 7, 9, 11, 12, are amended.

Claims 15 - 21 are added.

At the time of the Office Action, claims 1 - 14 were pending in this application.

Claims 1 - 3, 5 - 8, 11 and 13 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,608,804 to Shim ("Shim"). Claims 4 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Shim in view of U.S. Patent No. 6,366,544 to Scibora ("Scibora"). Claims 9, 12, and 14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Shim in view of U.S. Patent No. 6,606,284 to Sakamoto et al. ("Sakamoto").

Review of Applicants' Invention

Prior to addressing the Examiner's rejections on art, a brief review of Applicants' invention may be helpful. Briefly, the claimed invention makes use of identifying information contained on optical storage media. In contrast to prior art, the identifying information is unique to each particular storage media (i.e. each optical disc). Thus, the optical storage medium can be identified down to the level of an individual disc. This identifying information is read from the storage medium and compared to data stored on a storage device in an apparatus to determine if specific adjustment parameter values for that particular identifiable disc are available. If so, the adjustment parameter values can be read from the storage device and used for adjusting the record/playback of the apparatus into which the disc has been inserted to more rapidly begin the process of reading from and/or writing to the unique individual disc. The stored data can, for example, include adjustment parameters unique to the particular disc, such as focus gain, focus offset, track gain, track offset or HF gain.

The claimed invention is to be distinguished from more conventional systems in which individual identification of the media or disc does not take place. Accordingly, the systems of the prior art cannot identify an individual disc, and

therefore cannot make adjustments to the record/playback apparatus which are unique to that particular disc.

Rejection of Claims 1-3, 5-8, 11 and 13 under 35 U.S.C. §102(e)

Claims 1-3, 5-8, 11 and 13 were rejected under 35 U.S.C. §102(e) as being anticipated by Shim. Amended claims 1 and 7 each recite detecting an identification information item from an optical recording medium to identify a recording medium individually among recording media of the same type. Shim wholly fails to disclose this limitation.

The Examiner has asserted the teachings of Shim at col. 4, lines 8-16; col. 6, lines 21-22; and in Fig. 4, step 402. These citations, however, fail to teach or suggest detecting identification information to identify a recording medium individually among recording media of the same type. Specifically, at col. 4, lines 8-10 Shim discloses “the present invention may also be achieved with a method for discriminating the type of a disc in an optical disc player...” Moreover, at col. 4, lines 10-13 Shim states that the method includes the step of “confirming the type of disc...” Importantly, an identifier which identifies a type of disc is different from an identifier that identifies a recording medium individually among recording media of the same type. The claimed identifier that identifies a recording medium individually identifies the specific item. In contrast, an identifier that identifies a type of disc identifies a group to which the disc belongs. An analogy might clarify this point: although the identifier “Toyota Camry” identifies a car type, this identifier does not identify my particular Toyota Camry having vehicle identification number “XXXXXXXXXX”.

Claims 1 and 7 also recite checking in a storage means for a stored adjustment parameter value associated with the recording medium. The Examiner asserted col. 6, lines 23-28 and Fig. 4, steps 404 and 406 as disclosing this limitation, however, the cited sections do not concern a stored adjustment parameter. Specifically, at col. 6, lines 23-28 Shim discloses:

...the microcomputer 116 reads data written in the BCA code area on the disk 100 at step 402. The read data is restored by the DSP 110. The microcomputer 116 extracts the disk code contained in the read data through the DSP 110 at step 404. The microcomputer 116 confirms the type of the disk corresponding to the extracted disk code by retrieving a disk code table at step 406. (*Emphasis added*).

Steps 404 and 406 of Fig. 4 merely show symbolic boxes for extracting a disc code and then using the disc code to confirm the disc type. Importantly, disc code which confirms a disc type is not equivalent to Applicants' adjustment parameter value. As noted, a disc type identifies a group to which the disc belongs. As defined by Applicants, however, an adjustment parameter value is used for adjusting an apparatus to rapidly produce read and/or write readiness of the apparatus (p. 4, lines 9-17). Examples of such adjustment parameters are focus gain, focus offset, track gain, track offset and HF gain. Thus, Shim fails to disclose the recited limitation.

In addition claims 1 and 7 recite reading the stored adjustment parameter value from the storage means and, if the check made in the previous step is positive, adjusting the apparatus in accordance with the adjustment parameter. Shim also fails to disclose this limitation. Instead, Shim merely retrieves a disk code table to identify a disc type from a disc type value. Notably, Shim lacks any teaching or suggestion of adjusting an apparatus in accordance with a disc specific adjustment parameter.

Claim 2 recites that if the check made in step b) of claim 1 is negative, the apparatus is adjusted in order to be able to read and/or write to a data area of the optical recording medium. Afterwards, at least one adjustment parameter value associated with the recording medium and corresponding to the adjusted state of the apparatus is stored in the storage means. The Examiner has asserted that this limitation is disclosed in col. 6, lines 26-31 and in Fig. 4 at steps 404, 406. Applicant respectfully disagrees. Col. 6 lines 26-31 states:

...the microcomputer 116 confirms the type of the disk corresponding to the extracted disk code by retrieving a disk code table at step 406. The disk code table is provided from a manufacturer by previously mapping the disk codes corresponding to the types of disks and stored in a nonvolatile memory of the microcomputer 116...

In the cited text Shim specifically states that the disk code table is provided from a manufacturer by previously mapping the disk codes. Notwithstanding that disc codes are distinct from Applicants' adjustment parameter value, the disc codes are not stored in response to a particular condition determined during operation of the apparatus. Instead the disc codes are predetermined by a manufacturer. Thus, whereas Applicants provide a method which dynamically acquires disc specific adjustment parameters, Shim's disk codes are manufacturer defined and are not

changeable or updateable. Moreover, in each of claims 1, 2 and 7 Applicants recite conditions that are required to perform specific actions related to reading and storing of adjustment parameter values. Shim provides no teaching or suggestion of such conditional statements.

Rejection of Claims 4, 9, 10, 12 and 14 under 35 U.S.C. §103(a)

Claims 4 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Shim in view of Scibora. Claims 9, 12, and 14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Shim in view of Sakamoto. However, Scibora and Sakamoto do not make up for the deficiencies of Shim. Specifically, neither Scibora nor Sakamoto disclose detecting an identification information item from an optical recording medium to identify a recording medium individually among recording media of the same type. Moreover, neither Scibora nor Sakamoto disclose reading or storing adjustment parameter values.

New Claims 15 - 21

New claims 15 - 21 have been added to recite further aspects of Applicants' invention which Applicants believe are novel and unobvious.

New claim 19 recites a method for achieving read write readiness on a disc medium having a first data defining a disc type and a second data specific to only that disc. The method recites detecting the second data on the disc and acquiring a stored adjustment parameter related to the second data. The disc is read from or written to in accordance with the acquired adjustment parameter value.

Method claim 19 is patentable over Shim because, as discussed previously, Shim teaches acquiring manufacturer's predetermined settings related to the disc type but fails to disclose or suggest Applicants' use of a second data to access stored adjustment parameter(s) specific to the individual disc.

New claim 20 recites a method for achieving read write readiness on a disc medium and comprises detecting on the disc medium unmodifiable identification data that is specific to only that disc. The presence or absence of a stored adjustment parameter value is determined. The stored adjustment parameter value being for reading or writing on the disc medium in accordance with the data specific only to that disc medium. The stored value for reading or writing on said disc medium is used when the stored adjustment parameter value is present.

When the stored adjustment parameter value is not present, an adjustment parameter value for reading or writing on said disc medium is stored in accordance with the unmodifiable identification data.

Method claim 20 is patentable over Shim because, although Shim teaches acquiring manufacturer's predetermined settings related to the disc type, Shim fails to disclose or suggest Applicants' recited method for storing an adjustment parameter value when a stored adjustment parameter value is not present.

New apparatus claim 21 recites an apparatus for reading or writing on a disc medium and includes means for detecting on the disc unmodifiable identification data that relates specifically to only that disc medium. In accordance with the unmodifiable identification data an adjustment parameter is read from or written to a memory by a reading or writing means. A selecting means for selects an operating characteristic of the apparatus in accordance with the adjustment parameter.

The apparatus recited in claim 21 is patentable over Shim because, as discussed previously, Shim fails to disclose or suggest Applicants' recited means for reading or writing an adjustment parameter value specific to only that disc as determined by the unmodifiable identification data.

Applicants' invention as been explained and differences identified between it and the prior art of record. In view of the foregoing amendments and comments, claims 1 - 14 and newly added claims 15 - 21 are believed to be in condition for allowance. Accordingly, such action is respectfully requested.

Respectfully submitted,
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